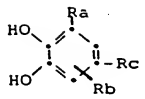
Abstract

Catechol derivatives of the formula



Ia

wherein Ra, Rb and Rc have the significance given herein,

the ester and ether derivatives thereof which are hydrolyzable under physiological conditions and the pharmaceutically acceptable salts thereof are described and possess valuable pharmacological properties. In particular, they inhibit the enzyme catechol-O-methyltransferase (COMT), a soluble, magnesium-dependent enzyme which catalyses the transference of the methyl group of S-adenosylmethionine to a catechol substrate, whereby the corresponding methyl ethers are formed. Suitable substrates which can be O-methylated by COMT and which can thus be deactivated are, for example, extraneuronal catecholamines and exogeneously-administered therapeutically active substances having a catechol structure.

Formula Ia above embraces not only compounds which form part of the invention, but also known compounds; the compounds which form part of the invention can be prepared according to known methods.